

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Kazunori KATAOKA et al. : **Mail Stop: PCT**  
Serial No. NEW : Attorney Docket No. 2004-1545A  
Filed September 29, 2004 :  
BIOSENSOR CHIP SURFACE  
CARRYING POLYETHYLENE  
GLYCOLATED NANOPARTICLES :  
[Corresponding to PCT/JP03/03504  
Filed March 24, 2003]

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☒ each U.S. Patent and U.S. Patent application publication (*for U.S. National applications filed after June 30, 2003 and International applications that have entered U.S. National Stage after June 30, 2003*),
- ☒ each reference previously cited in the international application PCT/JP03/03504; and/or
- ☐ each reference previously cited in prior parent application Serial No.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☒ a foreign patent office search report (International Search Report) (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office search report (International Search Report) citing one or more of the references is enclosed.
6. ☒ Comments:

The US '009 reference cited on the attached PTO-1449 form corresponds to the JP '727 reference cited on this form.

Respectfully submitted,

Kazunori KATAOKA et al.

By:   
Michael R. Davis

Registration No. 25,134  
Attorney for Applicants

MRD/pth  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
September 29, 2004

FORM PTO 1449 (modified)

ATTY DOCKET NO.  
2004-1545ASERIAL NO.  
NEW

10/509576

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: September 29, 2004

APPLICANT  
Kazunori KATAOKA et al.FILING DATE  
September 29, 2004

GROUP

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | DATE   | NAME            | CLASS | SUBCLASS | FILING DATE IF<br>APPROPRIATE |
|----------------------|----|--------------------|--------|-----------------|-------|----------|-------------------------------|
|                      | AA | 2002/0052009       | 5/2002 | Hornauer et al. |       |          |                               |
|                      | AB | 5,763,191          | 6/1998 | Knoll et al.    |       |          |                               |
|                      | AC | 3,071,823          | 1/1963 | Platt et al.    |       |          |                               |
|                      | AD | 6,207,392          | 3/2001 | Weiss et al.    |       |          |                               |
|                      | AE |                    |        |                 |       |          |                               |
|                      | AF |                    |        |                 |       |          |                               |
|                      | AG |                    |        |                 |       |          |                               |
|                      | AH |                    |        |                 |       |          |                               |
|                      | AI |                    |        |                 |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | DATE   | COUNTRY | CLASS | SUBCLASS | TRANSLATION<br>YES NO |
|--|----|--------------------|--------|---------|-------|----------|-----------------------|
|  | AJ | 02/20200           | 3/2002 | WO      |       |          |                       |
|  | AK | 02/04918           | 1/2002 | WO      |       |          |                       |
|  | AL | 11-140097          | 5/1999 | Japan   |       |          |                       |
|  | AM | 11-211727          | 8/1999 | Japan   |       |          |                       |
|  | AN | 03/18690           | 3/2003 | WO      |       |          |                       |

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |    |   |
|--|----|---|
|  | AO | H. Otsuka, "Quantitative and reversible lectin-induced association of gold nanoparticles modified with alpha-lactosyl-omega-mercapto-poly(ethylene glycol)", J. Am. Chem. Soc., 123 (34): 8226-30, August 29, 2001. |
|  | AP | Kakizawa et al., "Block Kyojugotai to DNA kara naru Jiko Soshiki-ka Ryushi no Sosei to sono Saibonai DNA Donyu System eno Tenkai", Polymer Preprints, Japan, Vol. 50, No. 14, pages 3818 to 3819, 2001.             |
|  | AQ |   |

EXAMINER

DATE CONSIDERED